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CONFIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/601,384 07/27/2000 Lester F. Ludwig COLB-002/01US 2926 23373 7590 03/21/2005 **EXAMINER** SUGHRUE MION, PLLC SELLERS, DANIEL R 2100 PENNSYLVANIA AVENUE, N.W. ART UNIT PAPER NUMBER SUITE 800 WASHINGTON, DC 20037 2644

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Applicat	Application No. Applicant(s)			
		09/601,3	384	LUDWIG, LESTE	LUDWIG, LESTER F.	
		Examine	er .	Art Unit		
		Daniel R		2644		
Period fo	The MAILING DATE of this communicator Reply	tion appears on th	e cover sheet with t	the correspondence ac	ddress	
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA nsions of time may be available under the provisions of 3 SIX (6) MONTHS from the mailing date of this communication of the period for reply specified above is less than thirty (30) date of period for reply is specified above, the maximum statutoure to reply within the set or extended period for reply will, reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	ATION. 7 CFR 1.136(a). In no e ation. ays, a reply within the state or a reply within the state of the apply and within the apply and within the apply statute, cause the apply statute.	event, however, may a reply atutory minimum of thirty (30 will expire SIX (6) MONTHS splication to become ABAND	be timely filed D) days will be considered time from the mailing date of this DONED (35 U.S.C. § 133).	ily. communication.	
Status						
1)⊠	Responsive to communication(s) filed on <u>27 July 2000</u> .					
2a) <u></u> ☐	☐ This action is FINAL . 2b) ☐ This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
5)□ 6)⊠ 7)□	4) Claim(s) 1-49 is/are pending in the application. 4a) Of the above claim(s) 11-49 is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-10 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) 11-49 are subject to restriction and/or election requirement.					
Applicati	on Papers					
9)☐ The specification is objected to by the Examiner.						
10)⊠	10)⊠ The drawing(s) filed on <u>27 July 2000</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachmen	t(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
3) 🔲 Infor	e of Draftsperson's Patent Drawing Review (PTO- mation Disclosure Statement(s) (PTO-1449 or PTC r No(s)/Mail Date			all Date mal Patent Application (PT)	O-152)	

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DETAILED ACTION

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Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 1-10, drawn to a digital audio data processing system, class 700, subclass 94.

Group 2, claim(s) 11-25, drawn to a two-way video and voice communication system, class 348, subclass 14.01.

Group 3, claim(s) 26-49, drawn to a liquid crystal display having an input and output, class 345, subclass 104.

- 2. The inventions listed as Groups 1, 2, and 3 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Groups 1, 2, and 3 do not share the features of a display device with a microoptic structure. They also do not share the feature of supporting a network, such as the internet.
- 3. During a telephone conversation with Alan Kasper on 3/7/2005 a provisional election was made without traverse to prosecute the invention of Group 1, claims 1-10. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 11-49 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

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1. Claims 6-10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 6-10 have not been further treated on the merits. Claims 7, 9, and 10 are objected to because they depend directly or indirectly on the improper multiple dependent claims 6 and/or 8.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Minami et al., U.S. Patent No. 5,555,310 (hereinafter Minami).
- 4. Regarding claim 1, see Minami

A device for use in association with a multimedia system capable of capturing and/or reproducing at least audio signals at a multimedia workstation, the device being

- A) associated with at least one microphone and
- B) configured to

i) perform adaptive acoustic stereo echo-canceling operations (Col. 3, lines 58-62 and Col. 6, lines 56-63)

(a) on at least one channel of audio captured at the associated microphone. (Col. 3, lines 63-64).

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Minami teaches a multimedia system capable of capturing and reproducing audio signals and performing adaptive acoustic echo-canceling operations.

- 5. Regarding claim 2, the further limitation of claim 1, see Minami
- ... wherein
- A) the device is
 - i) associated with a plurality of microphones and (Fig. 3, units 101R and 101L)
 - ii) further configured to have
 - (a) synthetic aperture microphone processing capabilities. (Col. 5, lines 45-52)

Minami teaches a device with synthetic aperture microphone capabilities.

- 6. Regarding claim 3, the further limitation of claim 2, see Minami
- ... wherein
- A) the adaptive acoustic stereo echo-canceling and synthetic microphone processing capabilities
- B) are combined in a single packaging. (Fig. 9, units 510₁-510₄, 600, and 720)

It is inherent that the apparatus, taught by Minami, is combined in a single packaging.

7. Regarding claim 4, see the preceding argument with respect to claim 1.

A device for use in association with a multimedia system capable of reproducing at least audio signals at a multimedia workstation, the device

- A) being associated with a plurality of microphones, and
- B) including synthetic aperture microphone processing capabilities.

Minami teaches a multimedia system with these features using a plurality of microphones.

8. Regarding claim 5, the further limitation of claims 2, 3, or 4, see Minami

... wherein

A) the synthetic aperture microphone processing capabilities include the capability to i) adjust a position of a spatial region

(a) corresponding to the area of maximum sensitivity of the synthetic aperture microphone function. (Col. 21, lines 28-65)

Minami teaches a system with these features.

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Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chu et al., U.S. Patent No. 5,664,021 and Benesty et al., U.S. Patent No. 5,828,756.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel R. Sellers whose telephone number is 703-605-4300. The examiner can normally be reached Monday to Friday 9am to 6:30pm with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 703-305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SINHTRAN SUPERVISORY PATENT EXAMINER

DRS